

Form PTO-1449 (modified)

Atty. Docket No.

Serial No.

NUBI:002/FUS

08/912,978

List of Patents and Publications for Applicant's

Applicant

INFORMATION DISCLOSURE STATEMENT

Rajindra Aneja

(Use several sheets if necessary)

Filing Date:

Group:

August 13, 1997

1502

U.S. Patent Documents

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U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date if App.
	A1	4,772,471	09/20/88	Vanlerberghe <i>et al.</i>	424	450	12/12/79
	A2	4,830,857	05/16/89	Handjani <i>et al.</i>	424	450	10/21/85
	A3	4,837,028	06/06/89	Allen	424	450	12/24/86
	A4	4,920,016	04/24/90	Allen <i>et al.</i>	424	450	12/18/87
	A5	5,013,556	05/07/91	Woodle <i>et al.</i>	424	450	10/20/89
	A6	5,153,000	10/06/92	Chikawa <i>et al.</i>	424	450	11/16/89
	A7	5,225,212	07/06/93	Martin <i>et al.</i>	424	450	12/10/90
	A8	5,395,619	03/07/95	Zalipsky <i>et al.</i>	424	450	03/03/93

Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
	B1	EP 0370491	04-19-95	Europe			

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C1	Allen and Chonn, "Large unilamellar liposomes with low uptake into the reticuloendothelial system," <i>FEBS Lett.</i> , 223(1):42-46, 1987.
	C2	Allen, Hansen, Martin, Redemann, Yau-Young, "Liposomes containing synthetic lipid derivatives of poly(ethylene glycol) show prolonged circulation half-lives <i>in vivo</i> ," <i>Biochim. Biophys. Acta</i> , 1066:29-36, 1991.
	C3	Amselem, Cohen, Barenholz, " <i>In vitro</i> tests to predict <i>in vivo</i> performance of liposomal dosage forms," <i>Chem. Phys. Lipids</i> , 64:219-237, 1993.

Examiner:

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Information Disclosure Statement — PTO-1449 (Modified)

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Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C4	Aneja, "Structural and stereochemical purity of glycerophospholipids," <i>Biochem. Soc. Trans.</i> , 2:38-41:1974.
	C5	Aneja, "Novel biomolecular approaches to steric stabilization of liposomes: materials and organization," An American Chemical Society Symposium, ACS Annual Meeting, Sept. 8-11, Las Vegas, NV, 1977.
	C6	Aneja, "Novel biomaterials for optimizing liposomal drug delivery," <i>213th ACS National Meeting of the American Chemical Society</i> , San Francisco, California, USA, <i>Abstracts of Papers American Chemical Society</i> , 213:(1-3), Abstract BIOT-003, April 13-17, 1997.
	C7	Aneja, Chadha, Davies, "A general synthesis of glycerophospholipids," <i>Biochim. Biophys. Acta</i> , 218:102-111, 1970.
	C8	Aneja and Davies, "The synthesis of a spin-labelled glycerophospholipid," <i>Chem. Phys. Lipids</i> , 4:60-71, 1970.
	C9	Bahr, Deppe, Karas, Hillenkamp, "Mass spectrometry of synthetic polymers by UV-matrix-assisted laser desorption/ionization," <i>Anal. Chem.</i> , 64:2866-2869, 1992.
	C10	Balch, Morris, Brooks, Sleight, "The use of N-(7-nitrobenz-2-oxa-1,3-diazole-4-yl)-labeled lipids in determining transmembrane lipid distribution," <i>Chem. Phys. Lipids</i> , 70:205-212, 1994.
	C11	Bangham and Horne, "Negative staining of phospholipids and their structural modification by surface-active agents as observed in the electron microscope," <i>J. Mol. Biol.</i> , 8:660-668, 1964.
	C12	Bangham, Standish, Watkins, "Diffusion of univalent ions across the lamellae of swollen phospholipids," <i>J. Mol. Biol.</i> , 13:238-252, 1965.

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Exam. Init.	Ref. Des.	Citation
	C13	Bartlett, "Phosphorus assay in column chromatography," <i>J. Biol. Chem.</i> , 234(3):466-468, March 1959.
	C14	Beauchamp, Gonias, Menapace, Pizzo, "A new procedure for the synthesis of polyethylene glycol-protein adducts; effects on function, receptor recognition, and clearance of superoxide dismutase, lactoferrin, and α_2 -macroglobulin," <i>Anal. Biochem.</i> , 131:25-33, 1983.
	C15	Blume and Cevc, "Liposomes for the sustained drug release <i>in vivo</i> ," <i>Biochim. Biophys. Acta</i> , 1029:91-97, 1990.
	C16	Caffrey, "Kinetics and mechanism of the lamellar gel/lamellar liquid-crystal and lamellar/inverted hexagonal phase transition in phosphatidylethanolamine: A real-time x-ray diffraction study using synchrotron radiation," <i>Biochemistry</i> , 24:4826-4844, 1985.
	C17	Caffrey and Bilderback, "Kinetics of the main phase transition of hydrated lecithin monitored by real-time x-ray diffraction," <i>Biophys. J.</i> , 45:627-631, March 1984.
	C18	Chattopadhyay, "Chemistry and biology of <i>N</i> -(7-nitrobenz-2-oxa-1,3-diazol-4-yl)-labeled lipids: fluorescent probes of biological and model membranes," <i>Chem. Phys. Lipids</i> , 53:1-15, 1990.
	C19	Dao, McIntyre, Sleight, "Large-scale preparation of asymmetrically labeled fluorescent lipid vesicles," <i>Anal. Biochem.</i> , 196:46-53, 1991.
	C20	de Gennes, "Conformations of polymers attached to an interface," <i>Macromolecules</i> , 13:1069-1075, 1980.
	C21	Fattal, Nir, Parente, Szoka Jr., "Pore-Forming Peptides Induce Rapid Phospholipid flip-flop in membranes," <i>Biochemistry</i> , 33:6721-6731, 1994.

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Exam. Init.	Ref. Des.	Citation
	C22	Gombotz and Pettit, "Biodegradable polymers for protein and peptide drug delivery," <i>Bioconjugate Chem.</i> , 6:332-351, 1995.
	C23	Gregoriadis, "Fate of injected liposomes: observations on entrapped solute retention, vesicle clearance and tissue distribution <i>in vivo</i> ," <i>In: Liposomes as Drug Carriers</i> , Wiley, New York, pp. 3-18, 1988.
	C24	Griffin, "Calculation of "HLB" values of nonionic surfactants," <i>J. Soc. Cosmetic Chemists</i> , 1:311-326, 1949, as cited in <i>Biological Abstracts</i> , 27:1955, column 9941.
	C25	Griffin, "Calculation of "HLB" values of nonionic surfactants," <i>Am. Perfumer Essential Oil Rev.</i> , 65(5):26-29, 1955, as cited in <i>Biological Abstracts</i> , 27:1955, column 9941.
	C26	Herbette, Marquardt, Scarpa, Blasie, "A direct analysis of lamellar x-ray diffraction from hydrated oriented multilayers of fully functional sarcoplasmic reticulum," <i>Biophys. J.</i> , 20:245-272, 1977.
	C27	Hope, Bally, Webb, Cullis, "Production of large unilamellar vesicles by a rapid extrusion procedure. Characterization of size distribution, trapped volume and ability to maintain a membrane potential," <i>Biochim. Biophys. Acta</i> , 812:55-65, 1985.
	C28	Hristova and Needham, "Physical properties of polymer-grafted bilayers," <i>In: Stealth® Liposomes</i> , Lasic and Martin eds., CRC Press, Boca Raton, FL, Ch. 5, pp. 35-49, 1995.
	C29	Kenworthy, Hristova, Needham, McIntosh, "Range and magnitude of the steric pressure between bilayers containing phospholipids with covalently attached poly(ethylene glycol)," <i>Biophys. J.</i> , 68:1921-1936, May 1995.

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Exam. Init.	Ref. Des.	Citation
	C30	Kenworthy, Simon, McIntosh, "Structure and phase behavior of lipid suspensions containing phospholipids with covalently attached poly(ethylene glycol)," <i>Biophys. J.</i> , 68:1903-1920, 1995.
	C31	Kenworthy, Simon, McIntosh, "Effects of lipids with covalently attached polyethylene glycol on distearoylphosphatidylcholine bilayer structure," <i>Biophysical Journal</i> , 38th Annual Meeting of the Biophysical Society, New Orleans, Louisiana, USA, March 6-10, 1994.
	C32	Klibanov, Maruyama, Beckerleg, Torchilin, Huang, "Activity of amphipathic poly(ethylene glycol) 5000 to prolong the circulation time of liposomes depends on the liposome size and is unfavorable for immunoliposome binding to target," <i>Biochim. Biophys. Acta</i> , 1062:142-148, 1991.
	C33	Klibanov, Maruyama, Torchilin, Huang, "Amphipathic polyethyleneglycols effectively prolong the circulation time of liposomes," <i>FEBS Lett.</i> , 268(1):235-237, 1990.
	C34	Kuhl, Leckband, Lasic, Israelachvili, "Modulation of interaction forces between bilayers exposing short-chained ethylene oxide headgroups," <i>Biophys. J.</i> , 66:1479-1488, 1994.
	C35	Lasic, "Sterically stabilized vesicles," <i>Angew. Chem. Int. Ed. Engl.</i> , 33:1685-1698, 1994.
	C36	Lasic and Barenholz, eds., "F. Liposomes in drug delivery," <i>In: Handbook of Nonmedical Applications of Liposomes, From Gene Delivery and Diagnostics to Ecology</i> , CRC Press, Boca Raton, FL., Vol. IV, pp. 308-309, 1996.
	C37	Lasic, Martin, Gabizon, Huang, Papahadjopoulos, "Sterically stabilized liposomes *: a hypothesis on the molecular origin of the extended circulation times," <i>Biochim. Biophys. Acta</i> , 1070:187-192, 1991.

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Exam. Init.	Ref. Des.	Citation
	C38	Lasic, Woodle, Martin, Valentincic, "Phase behavior of »stealth®-lipid«-lecithin mixtures," <i>Periodicum Biologorum</i> , 93(2):287-290, 1991.
	C39	Lefkowitz, Stadel, Caron, "Adenylate cyclase-coupled beta-adrenergic receptors. Structure and mechanisms of activation and desensitization," <i>Ann. Rev. Biochem.</i> , 52:159-186, 1983.
	C40	Lesieur, Grabielle-Madelmont, Paternostre, Ollivon, "Study of size distribution and stability of liposomes by high performance gel exclusion chromatography," <i>Chem. Phys. Lipids</i> , 64:57-82, 1993.
	C41	Liu and Huang, "Small, but not large, unilamellar liposomes composed of dioleoylphosphatidylethanolamine and oleic acid can be stabilized by human plasma," <i>Biochemistry</i> , 28:7700-7707, 1989.
	C42	MacDonald, MacDonald, Menco, Takeshita, Subbarao, Hu, "Small-volume extrusion apparatus for preparation of large, unilamellar vesicles," <i>Biochim. Biophys. Acta</i> , 1061:297-303, 1991.
	C43	Marsh, "X-ray diffraction data," In: <i>CRC Handbook of Lipid Bilayers</i> , CRC Press, Boca Raton, FL, Ch. II.8, pp. 163-183, 1990.
	C44	Mayer, Hope, Cullis, "Vesicles of variable sizes produced by a rapid extrusion procedure," <i>Biochim. Biophys. Acta</i> , 858:161-168, 1986.
	C45	McIntosh, Magid, Simon, "Steric repulsion between phosphatidylcholine bilayers," <i>Biochem.</i> , 26:7325-7332, 1987.
	C46	Mori, Klibanov, Torchilin, Huang, "Influence of the steric barrier activity of amphipathic poly(ethyleneglycol) and ganglioside GM ₁ on the circulation time of liposomes and on the target binding of immunoliposomes <i>in vivo</i> ," <i>FEBS Lett.</i> , 284(2):263-266, June 1991.

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Exam. Init.	Ref. Des.	Citation
	C47	Navarro, Chabot, Sherrill, Aneja, Zahler, Racker, "Interaction of duramycin with artificial and natural membranes," <i>Biochemistry</i> , 24(17):4645-4650, 1985.
	C48	Needham, McIntosh, Lasic, "Repulsive interactions and mechanical stability of polymer-grafted lipid membranes," <i>Biochim. Biophys. Acta</i> , 1108:40-48, 1992.
	C49	Neugebauer, "Detergents: an overview," <i>Methods in Enzymology</i> , 182:239-252, 1990.
	C50	Nishikawa, Arai, Inoue, "Scavenger receptor-mediated uptake and metabolism of lipid vesicles containing acidic phospholipids by mouse peritoneal macrophages," <i>J. Biol. Chem.</i> , 265(9):5226-5231, March 25, 1990.
	C51	Nolan, Magargee, Posner, Hammerstedt, "Flow cytometric analysis of transmembrane phospholipid movement in bull sperm," <i>Biochemistry</i> , 34:3907-3915, 1995.
	C52	Parr, Ansell, Choi, Cullis, "Factors influencing the retention and chemical stability of poly(ethylene glycol)-lipid conjugates incorporated into large unilamellar vesicles," <i>Biochim. Biophys. Acta</i> , 1195:21-30, 1994.
	C53	Parsegian, Rand, Fuller, Rau, "Osmotic stress for the direct measurement of intermolecular forces," <i>Methods Enzymol.</i> , 127:400-416, 1986.
	C54	Rand and Luzzati, "X-ray diffraction study in water of lipids extracted from human erythrocytes," <i>Biophys. J.</i> , 8:125-137, 1968.
	C55	Small, "Polar lipids," In: <i>Handbook of Lipid Research, The Physical Chemistry of Lipids, From Alkanes to Phospholipids</i> , Plenum Press, New York, Ch. 4, p. 93, 1986a.
	C56	Small, "Phospholipids," In: <i>Handbook of Lipid Research, The Physical Chemistry of Lipids, From Alkanes to Phospholipids</i> , Plenum Press, New York, Ch. 12, pp. 475-522, 1986b.

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Exam. Init.	Ref. Des.	Citation
	C57	Szoka, Olson, Heath, Vail, Mayhew, Papahadjopoulos, "Preparation of unilamellar liposomes of intermediate size (0.1-0.2 μ m) by a combination of reverse phase evaporation and extrusion through polycarbonate membranes," <i>Biochim. Biophys. Acta</i> , 601:559-571, 1980.
	C58	Szoka Jr. and Papahadjopoulos, "Procedure for preparation of liposomes with large internal aqueous space and high capture by reverse-phase evaporation," <i>Proc. Natl. Acad. Sci. U.S.A.</i> , 75(9):4194-4198, September 1978.
	C59	Winterhalter and Lasic, "Liposome stability and formation: Experimental parameters and theories on the size distribution," <i>Chem. Physics Lipids</i> , 64:35-43, 1993.
	C60	Woodle, "Surface-modified liposomes: assessment and characterization for increased stability and prolonged blood circulation," <i>Chem. Physics Lipids</i> , 64:249-262, 1993.
	C61	Woodle and Lasic, "Sterically stabilized liposomes," <i>Biochim. Biophys. Acta</i> , 1113:171-199, 1992.
	C62	Woodle, Engbers, Zalipsky, "New amphipatic polymer-lipid conjugates forming long-circulating reticuloendothelial system-evading liposomes," <i>Bioconjugate Chem.</i> , 5(6):493-496, 1994.
	C63	Woodle, Matthay, Newman, Hidayat, Collins, Redemann, Martin, Papahadjopoulos, "Versatility in lipid compositions showing prolonged circulation with sterically stabilized liposomes," <i>Biochim. Biophys. Acta</i> , 1105:193-200, 1992.
	C64	Worthington, "The interpretation of low-angle x-ray data from planar and concentric multilayered structures. The use of one-dimensional electron density strip models," <i>Biophys. J.</i> , 9:222-234, 1969.
	C65	Yatvin, Tegmo-Larsson, Dennis, "Temperature- and pH-sensitive liposomes for drug targeting," <i>Methods in Enzymology</i> , 149:77-87, 1987.
	C66	Zalipsky, "Functionalized poly(ethylene glycol) for preparation of biologically relevant conjugates," <i>Bioconjugate Chem.</i> , 6:150-165, 1995.

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